

## FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

Docket No.: LD154 DIV1 Sheet 1 of 7

Serial No.: 10/807089 Group: 165

Applicant: Wenying Li et al.

Filing Date: March 23, 2004

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Sub-class	Filing Date
WY	AA 08/856,533	5/14/97	Nicolaou, K., et al.	—	—	5/14/97
WY	AB 08/923,869	9/4/97	Nicolaou, K., et al.	—	—	9/4/97
WY	AC 60/032,864	12/13/96	Nicolaou, K., et al.	—	—	12/13/96

## FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	Sub-class	Filing Date
WY	BA 4138042.8	5/27/93	Germany (German and English abstract)			
	BB 19639456.2	5/29/97	Germany (German and English translation)			
	BC 19542986.9	5/29/97	Germany (German and English translation)			
	BD 19636343.8	3/5/98	Germany (German and English abstract)			
	BE 19645361.5	4/30/98	Germany (German and English abstract)			
	BF 19645362.3	4/30/98	Germany (German and English abstract)			
	BG 19647580.5	5/28/98	Germany (German and English translation)			
	BH 19701758	7/23/98	Germany (German and English abstract)			
	BI 19707505.3	9/3/98	Germany (German and English abstract)			
	BJ 19713970	10/8/98	Germany (German and English abstract)			
	BK 19720312	11/19/98	Germany (German and English abstract)			
	BL 19821954	11/19/98	Germany (German and English abstract)			
	BM 879 605	11/25/98	Europe (German and English abstract)			
	BN 19726627	12/24/98	Germany (German and English abstract)			
	BO 93/10121	5/27/93	World (PCT as published and English abstract)			
	BP 97/19086	5/29/97	World (PCT as published and English translation)			
	BQ 98/08849	3/5/98	World (PCT as published and English abstract)			
	BR 98/22461	5/28/98	World (PCT as published and English translation)			
WY	BS 98/24427	6/11/98	World			

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

08/22/00

**FORM PTO-1449**  
**INFORMATION DISCLOSURE STATEMENT**

Docket No.: LD154 DIV1 Sheet 2 of 7

Serial No.: 10/807089 Group: 1652

Applicant: Wenyi Li et al.

Filing Date: March 23, 2004

<i>W</i>	BT	98/25929	6/18/98	World (PCT as published and priority documents: U.S. 60/032,864, 08/856,533, 08/923,869)			
	BU	98/38192	9/3/98	World (PCT as published and English abstract)			
	BV	98/47891	10/29/98	World (PCT as published and English abstract)			
	BW	99/01124	1/14/99	World			
	BX	99/03848	1/28/99	World (PCT as published and English abstract)			
<i>W</i>	BY	99/07692	2/18/99	World (PCT as published and English translation)			

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

<i>W</i>	CA	Balog, A., et al., "Total Synthesis of (-)-Epothilone A", <i>Angew. Chem. Int. Ed. Engl.</i> , Vol. 35, No. 23/24, 2801-2803 (1996)
	CB	Bertini, F., et al., "Alkenes from Epoxides by Reductive Elimination with Magnesium Bromide-Magnesium Amalgam", <i>Chem. Commun.</i> , 144 (1970)
	CC	Bollag, D.M., et al., "Epothilones, A New Class of Microtubule-stabilizing Agents with a Taxol-like Mechanism of Action", <i>Cancer Res.</i> 55, No. 11, 2325-2333 (1995)
	CD	Fujisawa, T., et al., "Deoxygenation of Epoxides to Olefins with FeCl <sub>3</sub> - n-BuLi System", <i>Chem. Lett.</i> , 883-886 (1974)
	CE	Fujiwara, Y., et al., "Reductive Coupling of Carbonyl Compounds to Olefins by Tungsten Hexachloride-Lithium Aluminum Hydride and Some Tungsten and Molybdenum Carbonyls", <i>J. Org. Chem.</i> , Vol. 43, No. 12, 2477-2479 (1978)
	CF	Gladysz, J. A., et al., "Deoxygenation of Epoxides by Metal Atom Cocondensation", <i>J. Org. Chem.</i> , Vol. 41, No. 22, 3647-3648 (1976)
	CG	Hofle, G., et al., "Epothilone A and B - Novel 16-Membered Macrolides with Cytotoxic Activity: Isolation, Crystal Structure, and Conformation in Solution", <i>Angew. Chem. Int. Ed. Engl.</i> , Vol. 35, No. 13/14, 1567-1569 (1996)
<i>W</i>	CH	Hofle, G., et al., "N-Oxidation of Epothilone A-C and O-Acylation Rearrangement to C-19 and C-21 -Substituted Epothilones", <i>Angew. Chem. Int. Ed.</i> , Vol. 38, No. 13/14, 1971-1974 (1999)

*Wen Li et al.*

08/22/08

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**FORM PTO-1449**  
**INFORMATION DISCLOSURE STATEMENT**

Docket No.: LD154 DIV1 Sheet 3 of 7

Serial No.: 10/807089 Group: 1623-  
 1651

Applicant: Wenying Li et al.

Filing Date: March 23, 2004

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.) (Continued)**

W	CK	Kupchan, S. M., et al., "Reductive Elimination of Epoxides to Olefins with Zinc-Copper Couple", <i>J. Org. Chem.</i> , Vol. 36, No. 9, 1187-1190 (1971)
G	CL	Martin, M. G., et al., "Epoxides as Alkene Protecting Groups. A Mild and Efficient Deoxygenation", <i>Tetrahedron Letters</i> , Vol. 25, No. 3, 251-254 (1984)
	CM	McMurry, J. E., et al., "Reduction of Epoxides to Olefins with Low Valant Titanium", <i>J. Org. Chem.</i> , Vol. 40, No. 17, 2555-2556 (1975)
	CN	McMurry, J. E., et al., "Some Deoxygenation Reactions with Low-Valent Titanium ( $TiCl_3/LiAlH_4$ )", <i>J. Org. Chem.</i> , Vol. 43, No. 17, 3249-3254 (1978)
	CO	Meng, D., et al., "Remote Effects in Macrolide Formation Through Ring-Forming Olefin Metathesis: An Application to the Synthesis of Fully Active Epothilone Congeners", <i>J. Am. Chem. Soc.</i> , Vol. 119, No. 11, 2733-2734 (1997)
	CP	Nicolaou, K. C., et al., "An Approach to Epothilones Based on Olefin Metathesis", <i>Angew. Chem. Int. Ed. Engl.</i> , Vol. 35, No. 20, 2399-2401 (1996)
	CQ	Nicolaou, K. C., et al., "Total Synthesis of Epothilone A: The Macrolactonization Approach", <i>Angew. Chem. Int. Ed. Engl.</i> , Vol. 36, No. 5, 525-527 (1997)
	CR	Nicolaou, K. C., et. al., "Designed Epothilones: Combinatorial Synthesis, Tubulin Assembly Properties, and Cytotoxic Action against Taxol-Resistant Tumor Cells", <i>Angew. Chem. Int. Ed. Engl.</i> , Vol. 36, No. 19, 2097-2103 (1997)
	CS	Nicolaou, K.C., et al., "The Olefin Metathesis Approach to Epothilone A and Its Analogues", <i>J. Am. Chem. Soc.</i> , Vol. 119, No. 34, 7960-7973 (1997)
	CT	Nicolaou, K. C., et al., "Total Syntheses of Epothilones A and B via a Macrolactonization-Based Strategy", <i>J. Am. Chem. Soc.</i> , Vol. 119, No. 34, 7974-7991 (1997)
	CU	Nicolaou, K. C., et al., "Synthesis of Epothilones A and B in Solid and Solution Phase", <i>Nature</i> , Vol. 387, 268-272 (1997)
	CV	Nicolaou, K. C., et al., "Synthesis of Epothilones A and B in Solid and Solution Phase" (Correction to <i>Nature</i> 387, 268-272 (1997)), <i>Nature</i> , 390, 100 (1997)
W	CW	Räucher, S., et al., "Total Synthesis of (+)-Dihydrocostunolide via Tandem Cope-Claisen Rearrangement", <i>J. Org. Chem.</i> , Vol. 51, No. 26, 5503-5505 (1986)
	CX	Sato, M. et al., "Reduction of Organic Compounds with Low-Valent

**FORM PTO-1449**  
**INFORMATION DISCLOSURE STATEMENT**

Docket No.: LD154 DIV1 Sheet 4 of 7

Serial No.: 10/807089 Group: 165

Applicant: Wenyng Li et al.

Filing Date: March 23, 2004

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.) (Continued)**

W	CAA	Sharpless, K. B., et al., "Lower Valant Tungsten Halides. A New Class of Reagents for Deoxygenation of Organic Molecules", <i>J. Amer. Chem. Soc.</i> , Vol. 94, No. 18, 6538-6540 (1972)
	CAB	Su, D.-S., et al., "Total Synthesis of (-)-Epothilone B: An Extension of the Suzuki Coupling Method and Insights into Structure-Activity Relationships of the Epothilones", <i>Angew. Chem. Int. Ed. Engl.</i> , Vol. 36, No. 7, 757-759 (1997)
	CAC	Su, D.-S., et al., "Structure-Activity Relationships of the Epothilones and the First In Vivo Comparison with Paclitaxel", <i>Angew. Chem. Int. Ed. Engl.</i> , Vol. 36, No. 19, 2093-2096 (1997)
	CAD	Victory, S. F., et al., "Relative Stereochemistry and Solution Conformation of the Novel Paclitaxel-Like Antimitotic Agent Epothilone A", <i>Bioorg. Med. Chem. Letts.</i> , Vol. 6., No. 7, 893-898 (1996)
	CAE	Winkler, J. D., et al., "A Model For The Taxol (Paclitaxel)/Epothilone Pharmacophore", <i>Bioorg. Med. Chem. Letts.</i> , Vol. 6, No. 24, 2963-2966 (1996)
	CAF	Yang, Z., et al., "Total Synthesis of Epothilone A: The Olefin Metathesis Approach", <i>Angew. Chem. Int. Ed. Engl.</i> , Vol. 36, No. 1 / 2, 166-168 (1997)
	CAG	Bollag, D., et al., "Epothilone, A New Structural Class of Microtubule Stabilizer", Abstract, <i>Proc. Am. Assoc. Cancer Res.</i> , Vol. 36, 86 Meet. 454 (1995)
	CAH	Bollag, D., "Epothilones: Novel Microtubule-Stabilising Agents", <i>Expert Opin. Invest. Drugs</i> , Vol. 6, No. 7, 867-873 (1997)
	CAI	Bertinato, P., et al., "Studies Toward a Synthesis of Epothilone A: Stereocontrolled Assembly of the Acyl Region and Models for Macrocyclization", <i>J. Org. Chem.</i> , Vol. 61, No. 23, 8000-8001 (1996)
	CAJ	<i>Chemical &amp; Engineering News</i> , "Epothilone Epiphany: Total Syntheses", Vol. 74, No. 52, 24-26 (1996)
	CAK	<i>Chemical &amp; Engineering News</i> , "First Total Synthesis of Epothilone B", Vol. 75, No. 13, 23 (1997)
	CAL	<i>Chemical &amp; Engineering News</i> , "Solid-Phase Epothilone Synthesis Used to Create Analog Library", Vol. 75, No. 20, 33 (1997)
	CAM	Claus, E., et al., "Synthesis of the C1-C9 Segment of Epothilons", <i>Tetrahedron Lett.</i> , Vol. 38, No. 8, 1359-1362 (1997)
W	CAN	De Brabander, J., et al., "Towards a Synthesis of Epothilone A: Rapid Assembly of the C1-C6 and C7-C12 Fragments", <i>Synlett</i> , Vol. 7, 824-826 (1997)
Not needed Handwritten	CAO	Gabriel, T. and Wessjohann, L., "The Chromium-Reformatsky Reaction: Asymmetric Synthesis of the Aldol Fragment of the Cytotoxic Epothilons from 3-(2-Bromoacyl)-2-Oxazolidinones", <i>Tetrahedron Lett.</i> , Vol. 38, No. 1359-1362 (1997)

**FORM PTO-1449**  
**INFORMATION DISCLOSURE STATEMENT**

Docket No.: LD154 DIV1 Sheet 5 of 7

Serial No.: 10/807089 Group: 165

Applicant: Wenyng Li et al.

Filing Date: March 23, 2004

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.) (Continued)**

	CAQ	Marshall, A., "Total Synthesis of Epothilone", <i>Nature Biotechnology</i> , Vol. 15, No. 3, 205 (1997)
	CAR	Meng, D., et al., "Studies Toward a Synthesis of Epothilone A: Use of Hydroxyran Templates for the Management of Acyclic Stereochemical Relationships", <i>J. Org. Chem.</i> , Vol. 61, No. 23, 7998-7999 (1996)
	CAS	Meng, D., et al., "Total Syntheses of Epothilones A and B", <i>J. Am. Chem. Soc.</i> , Vol. 119, No. 42, 10073-10092 (1997)
	CAT	Menschling, S. and Kalesse, M., "Generation of Thiazoles by Column Dehydrogenation of Thiazolidines with MnO <sub>2</sub> ", <i>J. Prakt. Chem.</i> , Vol. 339, No. 1, 96-97 (1997)
	CAU	Mulzer, J. and Mantoulidis, A., "Synthesis of the C(1)-C(9) Segment of the Cytotoxic Macrolides Epothilon A and B", <i>Tetrahedron Lett.</i> , Vol. 37, No. 51, 9179-9182 (1996)
	CAV	Nicolaou, K., et al., "Chemistry, Biology and Medicine of Selected Tubulin Polymerizing Agents", <i>Pure Appl. Chem.</i> , Vol. 71, No. 6, 989-997 (1999)
	CAW	Nicolaou, K., et al., "Total Synthesis of Epothilone E and Related Side-chain Modified Analogues Via a Stille Coupling Based Strategy", <i>Bioorg. Med. Chem.</i> , Vol. 7, No. 5, 665-697 (1999)
	CAX	Schinzer, D., et al., "Studies Towards the Total Synthesis of Epothilones: Asymmetric Synthesis of the Key Fragments", <i>Chem. Eur. J.</i> , Vol. 2, No. 22, 1477-1482 (1996)
	CAY	Taylor, R. and Haley, J., "Towards the Synthesis of Epothilone A: Enantioselective Preparation of the Thiazole Sidechain and Macroyclic Ring Closure", <i>Tetrahedron Lett.</i> , Vol. 38, No. 12, 2061-2064 (1997)
	CAZ	Schinzer, D., et al., "Syntheses of (-)-Epothilone A", <i>Chem. Eur. J.</i> , Vol. 5, No. 9, 2483-2491 (1999)
	CBA	Schinzer, D., et al., "Syntheses of (-)-Epothilone B", <i>Chem. Eur. J.</i> , Vol. 5, No. 9, 2492-2500 (1999)
	CBB	Nicolaou, K. C., et al., "Synthesis and Biological Properties of C12,13-Cyclopropylepothilone A and Related Epothilones", <i>Chemistry &amp; Biology</i> , Vol. 5, No. 7, 365-372 (1998)



08/26/00

**FORM PTO-1449**  
**INFORMATION DISCLOSURE STATEMENT**

Docket No.: LD154 DIV1 Sheet 6 of 7

Serial No.: 10/807089 Group: (65)

Applicant: Wenying Li et al.

Filing Date: March 23, 2004

**U.S. PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Name	Class	Sub-class	Filing Date
AD	6,605,599	08/12/03	Vite et al.			
AE	5,969,145	10/19/99	Schinzer et al.			
AF	6,365,749	04/02/02	Kim et al.			
AG	6,518,421	02/11/03	Li et al.			
AH	6,262,094	07/17/01	Hoefle et al.			
AI	6,686,380	02/03/04	Lee			
AJ	6,727,276	04/27/04	Lee			
AK	6,576,651	06/10/03	Bandyopadhyay et al.			
AL	6,410,301	06/25/02	Julien et al.			
AM	6,320,045	11/20/01	Kim et al.			
AN	6,380,395	04/30/02	Vite et al.			
AO	6,399,638	06/04/02	Vite et al.			
AP	6,498,257	12/24/02	Vite et al.			
AQ	2003/0219877	11/27/03	Tang et al.			
AR	2003/0180760	09/25/03	Basch et al.			
AS	2003/0187039	10/02/03	Favreau et al.			
AT	2004/0053978	03/18/04	Lee et al.			
AU	2003/0220378	11/27/03	Lee			
AV	2004/0024032	02/05/04	Voi et al.			
AW	2003/0060623	03/27/03	Vite et al.			

*Wenying Li*

08/21/06

**FORM PTO-1449**  
**INFORMATION DISCLOSURE STATEMENT**

Docket No.: LD154 DIV1 Sheet 7 of 7

Serial No.: 10/807089 Group: 1657

Applicant: Wenyng Li et al.

Filing Date: March 23, 2004

**FOREIGN PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Country	Class	Sub- class	Filing Date
W	00/31246	2/6/00	PCT			
W	04/026254	04/01/04	PCT		X	

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.) (Continued)**

W	CBC	U. Bornscheuer, Biotechnology and Bioengineering, Vol. 58, No. 5, pages 554-559, 1998
W	CBD	Nicolaou et al., "Total Synthesis of 26-Hydroxyepothilone B and Related Analogues", Chem. Commun., 24, 2343-2344 (1997)
W	CBE	Nicolaou et al., "Total Synthesis of 26-Hydroxy-Epothilone B and Related Analogs Via a Macrolactonization Based Strategy", Tetrahedron, 54, 7127-7166 (1998)

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